

**PATENT COOPERATION TREATY**  
**PCT**  
**INTERNATIONAL PRELIMINARY EXAMINATION REPORT**

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>P20021PC00 FJP/AW</b>	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416).	
International Application No.  <b>PCT/AU2003/001417</b>	International Filing Date (day/month/year) <b>24 October 2003</b>	Priority Date (day/month/year)  <b>25 October 2002</b>
International Patent Classification (IPC) or national classification and IPC  <b>Int. Cl. <sup>7</sup> E04H 12/00, E04C 3/30, G09F 7/18</b>		
Applicant  <b>GOODCART PTY LTD et al</b>		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 3 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 4 sheet(s).

3. This report contains indications relating to the following items:

- |      |                                     |   |
|------|-------------------------------------|---|
| I    | <input checked="" type="checkbox"/> | Basis of the report   |
| II   | <input type="checkbox"/>            | Priority  |
| III  | <input type="checkbox"/>            | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  |
| IV   | <input type="checkbox"/>            | Lack of unity of invention  |
| V    | <input checked="" type="checkbox"/> | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| VI   | <input type="checkbox"/>            | Certain documents cited   |
| VII  | <input type="checkbox"/>            | Certain defects in the international application  |
| VIII | <input type="checkbox"/>            | Certain observations on the international application   |

Date of submission of the demand <b>25 May 2004</b>	Date of completion of the report <b>3 June 2004</b>
Name and mailing address of the IPEA/AU <b>AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaaustralia.gov.au Facsimile No. (02) 6285 3929</b>	Authorized Officer  <b>VINCE BAGUSAUSKAS</b> Telephone No. (02) 6283 2110

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/AU2003/001417

**I. Basis of the report**

## 1. With regard to the elements of the international application:\*

- ☐ the international application as originally filed.
- ☒ the description, pages 1, 4-8, as originally filed,  
pages , filed with the demand,  
pages 2, 3, received on 25 May 2004 with the letter of 25 May 2004
- ☒ the claims, pages , as originally filed,  
pages , as amended (together with any statement) under Article 19,  
pages , filed with the demand,  
pages 9, 10, received on 25 May 2004 with the letter of 25 May 2004
- ☒ the drawings, pages 1-8, as originally filed,  
pages , filed with the demand,  
pages , received on with the letter of
- ☐ the sequence listing part of the description:  
pages , as originally filed  
pages , filed with the demand  
pages , received on with the letter of

## 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

## 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/fig.

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/AU2003/001417

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. Statement**

Novelty (N)	Claims 1-16	YES
	Claims	NO
Inventive step (IS)	Claims 1-16	YES
	Claims	NO
Industrial applicability (IA)	Claims 1-16	YES
	Claims	NO

**2. Citations and explanations (Rule 70.7)**

None of the citations listed in the international search report discloses the feature of claim 1 of at least one arm fixedly engaged with at least one of the internal grooves to prevent rotation of the arm relative to the tubular column. Therefore the invention as defined in claim 1 and its dependent claims is both novel and inventive over the cited prior art.

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Furthermore, such poles are generally installed by one of three methods. The first method is the "direct bury" technique where the base of the pole is buried in a hole in the ground that may or may not be lined with concrete. Earth, rock or concrete is generally compressed into the gap around the base of the pole to firmly hold it in place. The second method utilises a spigot, which is fixed into a concrete block in the ground. The pole fits over the spigot with the lower end of the pole at ground level so that the spigot is hidden from view. In a third method, a rigid base is attached to the bottom of the pole and the base is bolted onto the top of a concrete block that is just above or below ground level.

- Each of these methods suffers from disadvantages. For example, poles that are direct buried or installed on spigots are difficult to install in a completely vertical position and they are also difficult to replace. Although the use of a pole base overcomes these problems, the base and fixing bolts can trip pedestrians if installed above or at ground level. Alternatively, if the base is installed below ground level, the hidden installation bolts and base can then corrode and fail without warning.

The present invention preferably overcomes or ameliorates one or more of the disadvantages of the prior art.

#### Summary of the Invention

- In a first aspect the present invention consists in a pole assembly for supporting at least one item, the pole assembly comprising at least one tubular column having at least two longitudinally extending external tracks integrally disposed therein, each of said external tracks having an internal groove adjacent thereto, and at least one of said items is an arm fixedly engaged with at least one of said internal grooves to prevent the rotation thereof relative to said tubular column.

Preferably said arm passes through the interior of said tubular column.

Preferably a reinforcing sleeve is internally fitted along at least a portion of said tubular column.

Preferably a round tubular section telescopically extends from said column.

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Preferably said round tubular section has at least one internal track.

Preferably at least one fluted cladding member is secured to said column by at least two circular collars.

5 Preferably a deformable clamp block is adapted to interconnect said at least one item to said column and said deformable clamp block engages with at least one of said external tracks of said column.

Preferably said deformable clamp block is adapted to be relatively movable with respect to said column to allow an angular adjustment of said at least one item relative to the longitudinal axis of said column.

10 Preferably said pole assembly further comprises a ventilated pole cap.

Preferably in one embodiment said round tubular section projects from the upper end of said column.

Preferably in another embodiment said round tubular section projects from the lower end of said column. Preferably said round tubular section is connected to a base member.

15 Preferably said base member is fully mounted within a drainage pit.

Preferably said pit is covered by a lid and at least two jacking screws are located in said drainage pit for adjustment of the height of said lid relative to surrounding ground level.

20 Preferably at least one fluted cladding member is secured to said column by at least an upper circular collar and a lower circular collar, and the bottom of said lower circular collar is seated on a ridge disposed on said lid.

Preferably at least one item is any one of a streetlight, sign, traffic signal, pedestrian signal, security camera or banner.

#### Brief Description of Drawings

25 Notwithstanding any other forms that may fall within its scope, some preferred forms of the invention will now be described by way of example only with reference to the accompanying drawings in which:

## THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:-

1. A pole assembly for supporting at least one item, the pole assembly comprising at least one tubular column having at least two longitudinally extending external tracks integrally disposed therein, each of said external tracks having an internal groove adjacent thereto, and at least one of said items is an arm fixedly engaged with at least one of said internal grooves to prevent the rotation thereof relative to said tubular column.
2. A pole assembly as claimed in claim 1, wherein said arm passes through the interior of said tubular column.
3. A pole assembly as claimed in claims 1 or 2, wherein a reinforcing sleeve is internally fitted along at least a portion of said tubular column.
4. A pole assembly as claimed in claim 1, wherein a round tubular section telescopically extends from said column.
5. A pole assembly as claimed in claim 4, wherein said round tubular section has at least one internal track.
6. A pole assembly as claimed in claim 1, wherein at least one fluted cladding member is secured to said column by at least two circular collars.
7. A pole assembly as claimed in claim 1, wherein a deformable clamp block is adapted to interconnect said at least one item to said column and said deformable clamp block engages with at least one of said external tracks of said column.
8. A pole assembly as claimed in claim 7, wherein said deformable clamp block is adapted to be relatively movable with respect to said column to allow an angular adjustment of said at least one item relative to the longitudinal axis of said column.
9. A pole assembly as claimed in claim 1, wherein said pole assembly further comprises a ventilated pole cap.
10. A pole assembly as claimed in claim 4, wherein said round tubular section projects from the upper end of said column.

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11. A pole assembly as claimed in claim 4, wherein said round tubular section projects from the lower end of said column.
12. A pole assembly as claimed in claim 11, wherein said round tubular section is connected to a base member.
13. A pole assembly as claimed in claim 12 wherein said base member is fully mounted within a drainage pit.
14. A pole assembly as claimed in claim 13 wherein said pit is covered by a lid and at least two jacking screws are located in said drainage pit for adjustment of the height of said lid relative to surrounding ground level.
15. A pole assembly as claimed in claim 14 wherein at least one fluted cladding member is secured to said column by at least an upper circular collar and a lower circular collar, and the bottom of said lower circular collar is seated on a ridge disposed on said lid.
16. A pole assembly as claimed in claim 1, wherein said at least one item is any one of a streetlight, sign, traffic signal, pedestrian signal, security camera or banner.